Patent Abstracts of Japan

PUBLICATION NUMBER : 2000231549
PUBLICATION DATE : 22-08-00

APPLICATION DATE : 07-02-00
APPLICATION NUMBER : 2000029153

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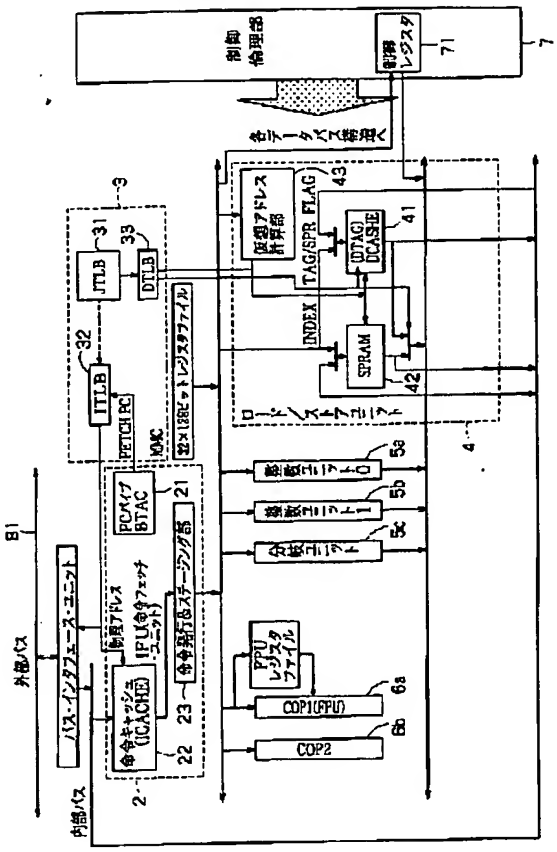
INT.CL. : G06F 15/78 G06F 12/08 G06F 12/10
G06F 13/28

TITLE : MICROPROCESSOR



ABSTRACT : PROBLEM TO BE SOLVED: To provide a microprocessor which incorporates a RAM available for purposes other than a cache memory and can easily and also fast access the RAM.

SOLUTION: This microprocessor is provided with an MMU 3 performing conversion from a virtual address to a physical address and an LSU 4 controlling the execution of a load/store instruction. The LSU 4 has a DCACHE 41 temporarily storing read/write data for an external memory, a SPRAM 42 used for special uses other than a cache and an address generator 43 generating a virtual address for accessing the DCACHE and the SPRAM. The MMU 3 generates a conversion table performing virtual/physical address conversion. Flag information showing whether or not access to the SPRAM is performed is included in the conversion table. When the flag is set, the SPRAM does not have to be allocated to a memory map of a main storage memory because access to the SPRAM is performed unconditionally.